

HD27030

5MHz–2000MHz RF Amplifier

Features

- Frequency Range: 5-2000MHz
- Gain: 21.5dB
- P_{1dB}: +7.8dBm
- IP3: +18.5dBm
- Noise Figure: 5.0dB
- DC Power: 5V/27mA
- SMA Connector

Performance Test @ 1000MHz

Description

HD27030 is a wideband low voltage RF Amplifier operates with frequency range from 5MHz to 2000MHz.



Electrical Specifications @ +25 °C, Z_S = Z_L = 50 Ω, V_{cc}= +5V

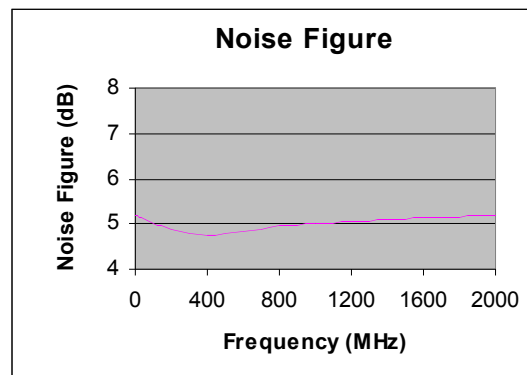
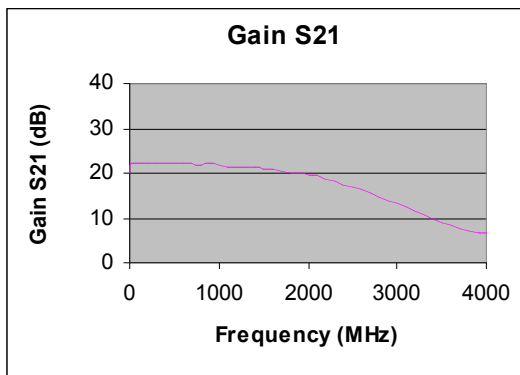
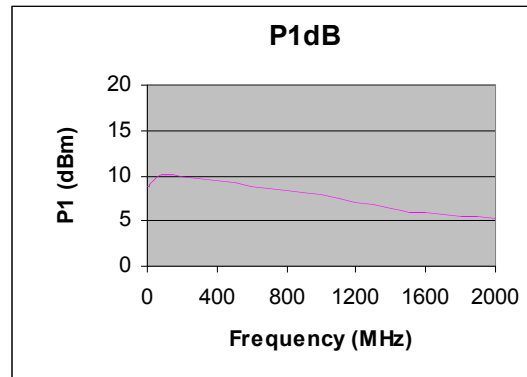
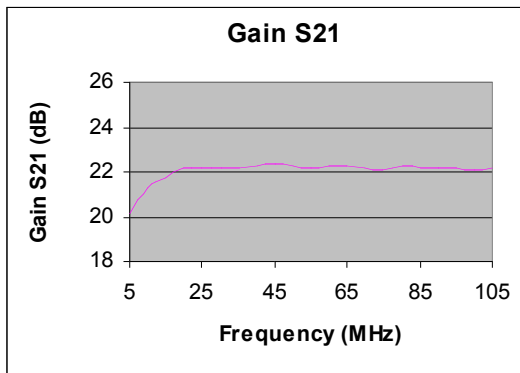
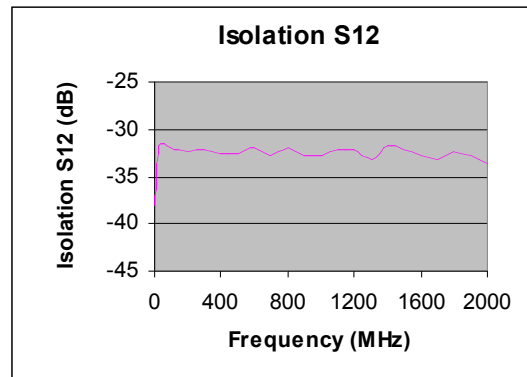
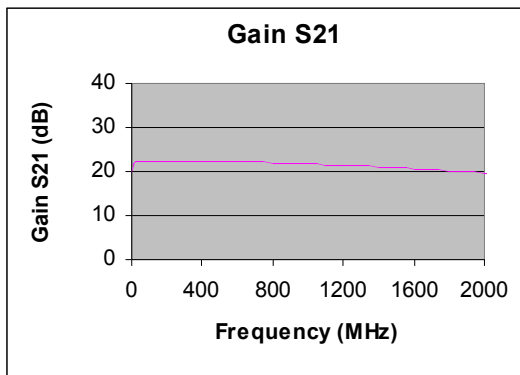
Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	5		2000
Gain				
f = 5 MHz	dB		20	
f = 100 MHz	dB		22	
f = 500 MHz	dB		22	
f = 1000MHz	dB		21.5	
f = 1500 MHz	dB		21	
f = 2000 MHz	dB		19	
P _{1dB} at 1000MHz	dBm		+7.8	
P _{SAT} at 1000MHz	dBm		+11.5	
IP3 at 1000MHz	dBm		+18.5	
Noise Figure at 1000MHz	dB		6	7.5
Reverse Isolation	dB		-32	
VSWR				
Input VSWR			1.6:1	
Output VSWR			1.9:1	

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DC Power Supply	V	4.5	5.0	5.5
Supply Current	mA		27	

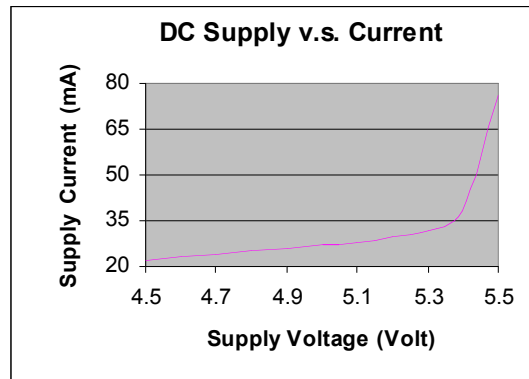
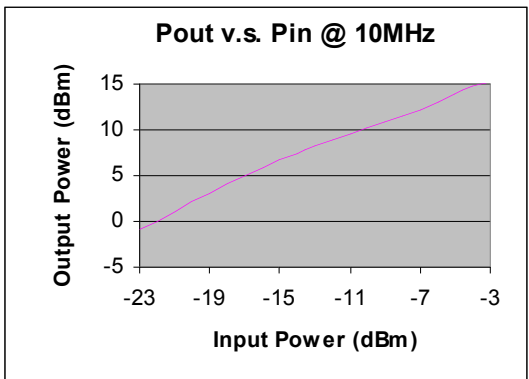
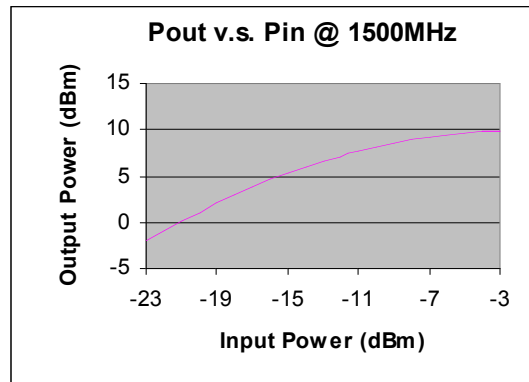
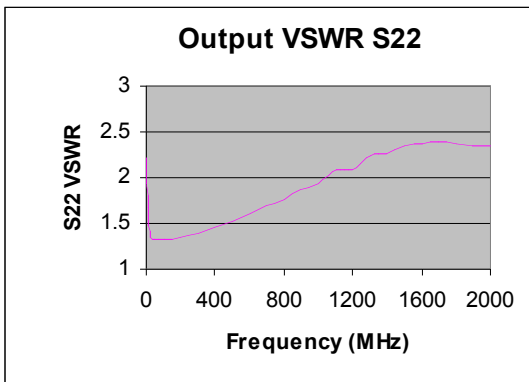
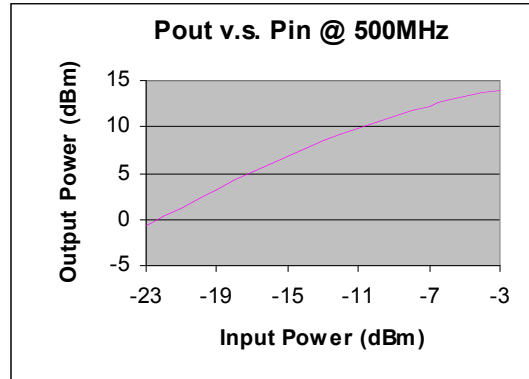
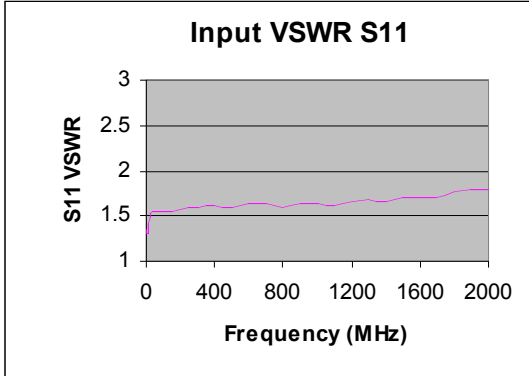
Typical Performance @ +25 °C



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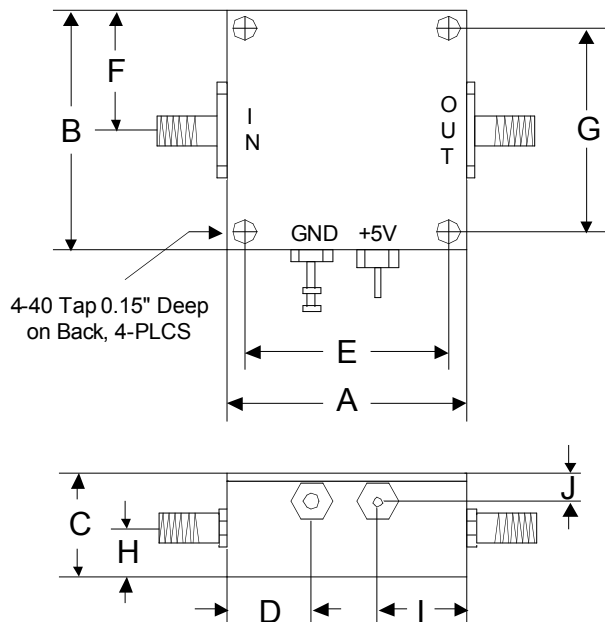
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Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+10dBm
Supply Voltage	+6.0V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +100 °C

Outline



	A	B	C	D	E	F	G	H	I	J
Inch	1.250	1.250	0.563	0.450	1.000	0.625	1.000	0.250	0.500	0.187
mm	31.75	31.75	14.29	11.43	25.40	15.88	25.40	6.35	12.70	4.76